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SLATE MOUNTAIN INSECT CONTROL PROJECT

ELDORADO NATIONAL FOREST

REGION 8

Approved: 2/3, 1947

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Forest Supervisor

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8
CONTROL - Eldorado
Insects
1946

SLATE MOUNTAIN INSECT CONTROL PROJECT

Insect reconnaissance surveys made by the Bureau of Entomology during 1945 showed that pine beetle infestation in the Slate Mountain area was becoming quite aggressive and they recommended that control work be done during the following winter and spring.

The area comprises approximately 4500 acres in Townships 11 and 12 North and Ranges 11 and 12 East, M. D. M., in the drainages of Whaler Creek, One Eye Creek and Slab Creek. It lies Northeast and Southwest from Slate Mountain which is the approximate center. The Placerville - Pine Grande County road runs through the area. This, with the addition of Forest roads and logging spur roads, make the area quite accessible.

The elevation varies from approximately 2500 to 4000 feet, and there is a rather wide range in types and sites due to abrupt changes in exposure, soil and moisture conditions. On the higher slopes of Slate Mountain, from Southeast to South and West, the soil is very shallow, site is poor and timber growth very sparse and short, (Site IV) but increases to Site III and II at lower elevations and on North slopes and along the bottoms of drainages. Northeast of Slate Mountain Site XI is generally encountered and the type varies from ponderosa pine - sugar pine to mixed conifer.

The terrain on the slopes of Slate Mountain is rather rugged as it is badly cutup by numerous sharp gulches and ravines and a ground cover of rather dense manzanita is present except in the heaviest stands of timber at the lower elevations. This condition occurs generally from Slate Mountain west to the Crozier Loop Unit west of One Eye Creek making working conditions very difficult. The Crozier Loop Unit and the Michigan-California Unit were of easier terrain, contained less undergrowth and working conditions and foot travel were much more favorable.

Of the 4500 acres in the Project area both private and Government land was involved, divided approximately as follows:

Government	2500 acres
Michigan-California Lumber Company . .	1120 acres
S. G. Beach Box & Lumber Company . . .	640 acres
Other Private	<u>360 Acres</u>
TOTAL	4500 Acres

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All work done on major private land ownerships was accomplished under cooperative agreements between the Forest Service and the State Division of Forestry and between the Forest Service and the land owners. A few scattered trees were treated on other private land with regular funds. These trees showed up after the Project was well under way and treating them protected adjacent Government timber.

The infestation in the Crozier Loop Unit was a direct result of the fire which occurred there in 1944 and nearly all of the trees infected were in virgin timber within the burned areas or within a few hundred yards of the boundary.

The infestation in the Michigan-California Unit built up in the heavy slash resulting from 1945 spring logging. The Slate Mountain Unit has been a center of more or less intensive infestations at different periods for quite a number of years. The last previous control project on the same area was done by GCO crews in 1942. At that time 408 trees, for a total volume of 257 M board feet, were treated.

Bark beetles responsible for the infestation were:

Dendroctonus brevicornis
Dendroctonus monticolae

The infestation was not uniform over the area as a whole. The concentration points were around the East side of the burn in the Crozier Loop Unit, along and adjacent to a low ridge running generally North and South in Sections 29 and 32 in the Michigan-California Unit and in the Slate Mountain Unit along the top of Slate Mountain from a point about one mile North of the lookout tower to the tower, then fanning out down the South, Southeast and Southwest slopes holding mostly to the ridges and poor site quality areas, and running out at the lower elevations in the better timber.

Broods were heavy in most cases and were found in all stages of growth even from the start of the project.

As the Project area included both Government and private land, and as it was desirable to do control work on all ownerships to prevent leaving pockets which would be sources of re-infestation, cooperative work agreements were made with the major private owners and the State Division of Forestry which stipulated that the Forest Service should do the work, furnishing all labor, supervision, tools and equipment for work done on private land and costs for such work to be paid for by the private owners and the State.

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No camps were organized for the Project although considerable time was contributed by the OPS crew stationed at Mosquito Spike Camp. Three paid men worked out of this camp for awhile during the latter part of the Project. All other labor was done by Forest Service Sealers working from their homes in Placerville and driving to and from work each day. Nearly all of these men held SP-5 ratings and were paid their regular salaries. Supervision of the job was contributed by personnel from the Forest Supervisor's office, spending only part time on the job, or approximately one man day per week.

The first work was done by the OPS crew late in December 1945 and the Sealers started working on January 5, 1946. The work was completed on April 23, 1946. Work was not continuous during this period due to storms, snow and bad road conditions, and the number of men working on the job varied considerably. The OPS crew varied from 4 to 6 men and the crew of sealers varied from 3 to 6.

Spotting was done by personnel from the Supervisor's office and one of the Sealers working in the crew who had had previous experience in control work. This work was done intermittently as needed to keep work lined out for the crew and no cost records are available for this work.

All trees treated were felled, limbed, peeled and bark burned. It was necessary to construct fire trails around practically all trees to prevent the spread of fire when the burning was done. Although time was not segregated for the separate operations and there are no figures to show time spent on fire trail construction, this was a major item due to the dense growth of manzanita which had to be cut before the trails could be made, in many instances. Travel from tree to tree also consumed a considerable amount of time on a large portion of the area due to steep ground and heavy brush.

Number of Trees Spotted	231
Number of Trees Treated	231
Volume Treated	200,490 b.f.
Average Tree	868 b.f.
Acreage covered with treating work . . .	4500

As far as known, all infested trees within the boundary as shown on the attached project map were treated.

Costs

Wages	\$3,711.18
Transportation	290.93
Saw filing	4.00
Total	<u>\$4,006.11</u>

4 - Slate Mountain Insect Control Project - 1-30-47

Cooperative Funds Spent	\$ 783.86
Forest Service Allotment	1,189.18
<u>Contributed Time</u>	
C.P.S. Crew	489.00
Forest Service	<u>1,539.12</u>
Total	\$4,006.11

Average Costs

Cost per tree	\$17.34
Cost per M board feet	19.98
Cost per acre protected	.91
Cost per man day treating labor	5.56
Cost per man day total labor	5.72

COMMENTS

All trees treated in the Grosier Loop Unit and a few in the Slate Mountain Unit were utilized as sawlogs during 1946, the volume being approximately 50 M board feet. It is expected that nearly all of the remaining trees of merchantable size in the Slate Mountain Unit will be utilized as sawlogs during 1947-48 as a timber sale embraces most of the area of the heaviest infestation and the material should still be merchantable at the time of logging.

Nearly all of the trees treated in the Michigan-California Unit were on outever land and very small and utilization was not attempted. There were, however, four or five trees with a volume of approximately 15 M board feet treated in the virgin stand of the logging area. These were utilized by the Michigan-California Lumber Company.

Approximately eighty percent of the volume or 160 M board feet of treated trees will be utilized.

A conservative estimate of the merchantable timber protected is 56,000 M board feet.

SUMMARY STATEMENT

Forest	Eldorado
Project Name	Slate Mountain
Duration	December 1945 - April 1946

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Tree species affected	Ponderosa pine - Sugar pine
Insects responsible	D. brevicornis - D. monticolae
Total acres involved	4500
Method of control	Peeling and burning
Number of trees spotted	231
Number of trees treated	231
Number of man days used	700
Expended from project funds	\$1,189.18
C.P.S.	\$489.00
Cooperative Funds	\$783.56
Contributed time and expenses	\$1,539.12
Total Cost	\$4,006.11
Total cost per tree	\$17.34
Results	Satisfactory
Percentage of reduction	90

CC: R.O.
Bureau of Ento. ✓
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INSECT CONTROL

SLATE MOUNTAIN AREA

ELDORADO NATIONAL FOREST

SCALE - 4 IN. = 1 MILE

AREA WORKED, JANUARY-APRIL, 1946

BOUNDARY OF CONTROL AREA

CUT-OVER, MICH.-CAL. LBR. CO., 1945

• • LOCATIONS OF TREATED TREES

Private Ownership



S.G. Beach Box and Lbr Co



Michigan-Calif Lbr Co



Other Private

Unit Boundary

